LPATH Berm Erosion Protection Measures Cache la Poudre River, Fort Collins, Colorado

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Pursuant to a Conditional Letter of Map Revision (CLOMR) completed by Anderson Consulting Engineers (ACE) in 2005, ACE was contracted by the City of Fort Collins Engineering Department to prepare plans and specifications for two concrete block revetment lined controlled spills from the Cache la Poudre River into the River bend Ponds Natural Area, located in Fort Collins, CO. This project was necessary to protect the downstream improvements associated with the East Prospect Road Widening project. LPATH is a left bank split flow path that leaves the Poudre River directly downstream of Timberline Road, recombining with river flows approximately 1.6 miles downstream nearly the Fossil Creek Reservoir Inlet Ditch (FCRID) Diversion Structure. This design included the following components:

- **design of riprap toe protection** along the left bank of the Cache la Poudre River to minimize the potential for retreat of the left bank near the controlled spill downstream of Timberline Road, and to match the effective condition bank line configuration;

- **design of concrete block revetment mat embankment stabilization measures** to control an existing spill located along the left bank of the Cache la Poudre River just downstream of Timberline Road, with the controlled spill structure intended to safely pass the regulatory (effective condition) 100-year split flow of nearly 2,700 cfs to LPATH at this location;

- **design of concrete block revetment mat embankment stabilization measures** to control an existing spill located along the left bank of the Cache la Poudre River a short distance upstream of Prospect Road, with the controlled spill structure intended to safely pass the remainder of the regulatory (effective condition) 100-year split flow to LPATH, matching the total existing 100-year split flow of approximately 4,000 cfs;

- **preparation** of traffic control, re-vegetation, and dewatering plans along with plans and profiles and cross sections of both spills;

- **close** co-ordination with the owner of the property, the City of Fort Collins Natural Resources Department, to ensure that the construction process and the final improvements minimized the impacts to the surrounding natural areas; and

- **construction management** services including assisting the City during the construction bidding process, contractor submittal review, on-site construction management, and the preparation of as-builts once the project is complete.